

ABSTRACT OF THE DISCLOSURE

A gas-circulating processing apparatus which comprises a processing chamber, a gas feeding piping, a gas supply piping, a first exhaust mechanism discharging a gas from the processing chamber, a second exhaust mechanism discharging a portion of a gas discharged from the first exhaust mechanism, a back pressure adjusting mechanism interposed between the first exhaust mechanism and the second exhaust mechanism to adjust a back pressure of the first exhaust mechanism, and a gas circulating piping which is configured to combine another portion of the gas that has been discharged from the first exhaust mechanism with a processing gas supplied from the gas supply piping, wherein the gas feeding piping has a larger inner diameter than that of the gas supply, or the processing gas is introduced into the first exhaust mechanism, or a first heater is provided to heat at least part of the circulating route.